

CLAIMS

1. A pyrotechnically ruptureable composite structural component (1):

5 - intended to transmit forces between a first and a second structural element (2, 3); and

- provided with elongate pyrotechnic detonation separation means (16) incorporated in said structural component (1) and able to break it so

10 that said first element (2) can be separated from said second element (3) along a line of separation, characterized:

- in that it comprises:

15 • a first part (10A) in which said pyrotechnic separation means (16) are incorporated and which is able to be connected to said first element (2);

• a second part (10B) able to be connected to said second element (3); and

20 • means (10C) of rigid assembly of said first and second parts (10A, 10B) via their free ends (11, 19) which are the opposite ends to said first and second elements (2, 3) respectively; and

- in that said assembly means (10C) comprise damping means (27):

25 • arranged between the free ends (11, 19) of said first and second elements (2, 3); and

• able to damp the detonation shock propagating to the free end (19) of said first part (10A) when said pyrotechnic separation means (16) are detonated.

2. The structural component as claimed in claim 1, characterized in that said assembly means (10C) form a chamber (21) enclosing said free ends (11, 19) of said first and second parts (10A and 10B) and confining said damping means (27) between said free ends (11, 19).

3. The structural component as claimed in claim 2,
characterized in that said chamber (21) is formed by
lateral plates (22, 23) arranged on each side of said
free ends (11, 19) and secured only to said second part
5 (10B).

4. The structural component as claimed in claim 3,
characterized in that said damping means (27) extend
laterally between said lateral plates (22, 23) and said
10 free end (19) of said first part (10A) and are confined
there.

5. The structural component as claimed in one of
claims 1 to 4,
15 characterized in that the free end (19) of said first
part (10A) comprises a widened head (20).

6. The structural component as claimed in claims 4
and 5,
20 characterized in that said damping means (27) have a
cross section in at least the approximate shape of a
stylized omega, the internal cavity of which is filled
by said widened head (20).

25 7. The structural component as claimed in one of
claims 1 to 6,
characterized in that said damping means (17) are in
the form of an open section placed over the free end
30 (19) of said first part (10A) to enclose it.

35 8. The structural component as claimed in one of
claims 1 to 7,
characterized in that the surface of said damping means
in contact with the free end (19) of said first part
35 (10A) comprises cavities (28) allowing the constituent
material of said damping means to expand when said
assembly means are subjected to mechanical stresses.

9. The structural component as claimed in one of claims 1 to 8, characterized in that said damping means (27) are of visco-elastic type.

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10. The structural component as claimed in claim 9, characterized in that said damping means (27) are made of a material chosen from materials in the group comprising natural rubbers, silicones, acrylonitrile butadienes or polyurethanes.

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